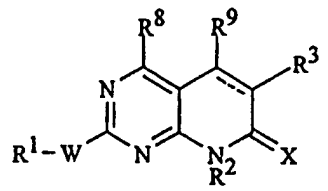
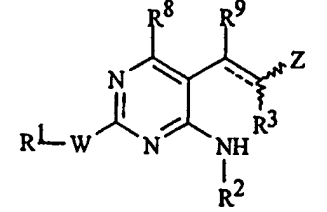


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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>C07D 471/04, 401/04,</b> <b>A61K 31/505</b>	<b>A3</b>	<b>(11) International Publication Number:</b> <b>WO 98/33798</b>  <b>(43) International Publication Date:</b> 6 August 1998 (06.08.98)
<b>(21) International Application Number:</b> PCT/US98/01343  <b>(22) International Filing Date:</b> 26 January 1998 (26.01.98)  <b>(30) Priority Data:</b> 60/037,220      5 February 1997 (05.02.97)      US 60/069,743      16 December 1997 (16.12.97)      US  <b>(71) Applicant (for all designated States except US):</b> WARNER LAMBERT COMPANY [US/US]; 201 Tabor Road, Morris Plains, NJ 07950 (US).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> BOSCHELLI, Diane, Harris [US/US]; 3A Elyse Drive, New City, NY 10956 (US). DOBRUSIN, Ellen, Myra [US/US]; 2205 Winchell, Ann Arbor, MI 48104 (US). DOHERTY, Annette, Marian [US/FR]; 8ème étage, 33, rue Poussin, F-75016 Paris (FR). FATTACY, Ali [IR/US]; Apartment 202, 1770 Green Street, San Francisco, CA 94123 (US). FRY, David, W. [US/US]; 4659 Ash Court, Ypsilanti, MI 48197 (US). BARVIAN, Mark, R. [US/US]; 1037 Morningside Drive, Ann Arbor, MI 48103 (US). KALLMEYER, Susanne, Trumpp [DE/US]; Apartment 92, 2735 Windwood Drive, Ann Arbor, MI 48105 (US). WU, Zhipei [CN/US]; 1436 Hidden Creek South, Saline, MI 48176 (US).		<b>(74) Agents:</b> RYAN, M. Andrea; Warner-Lambert Company, 201 Tabor Road, Morris Plains, NJ 07950 (US) et al.  <b>(81) Designated States:</b> AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, HU, ID, IL, IS, JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>  <b>(88) Date of publication of the international search report:</b> 5 November 1998 (05.11.98)
<b>(54) Titre: PYRIDO[2,3-D]PYRIMIDINES AND 4-AMINO-PYRIMIDINES AS INHIBITORS OF CELL PROLIFERATION</b>		
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>(I)</p> </div> <div style="text-align: center;">  <p>(II)</p> </div> </div>		
<b>(57) Abstract</b>  <p>This invention provides pyridopyrimidines and 4-aminopyrimidines that are useful for treating cell proliferative disorders, such as cancer and restenosis. We have now discovered a group of 7,8-dihydro-2-(amino and thio)pyrido[2,3-d]pyrimidines and 4-aminopyrimidines that are potent inhibitors of cyclin-dependent kinases (cdks) and growth factor-mediated kinases. The compounds are readily synthesized and can be administered by a variety of routes, including orally, and have sufficient bioavailability. This invention provides compounds of Formula (I) and Formula (II), where W is NH, S, SO, or SO<sub>2</sub>, R<sup>1</sup> includes phenyl and substituted phenyl, R<sup>2</sup> includes alkyl and cycloalkyl, R<sup>3</sup> includes alkyl and hydrogen, R<sup>8</sup> and R<sup>9</sup> include hydrogen and alkyl, and Z is carboxy. This invention also provides pharmaceutical formulations comprising a compound of Formula (I or II) together with a pharmaceutically acceptable carrier, diluent, or excipient therefor.</p>		

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/01343

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C07D471/04 C07D401/04 A61K31/505

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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